

assembly and the lower polar plate assembly, the lower plate assembly including an end edge, the coil seat having a first mark formed thereon; and

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a circuit board mounted to the axle tube and including a sensor element adapted to activate a rotor, the sensor element located on a vertical line extending from the end edge of the lower polar plate assembly along a direction parallel to a longitudinal axis of the axle tube, the sensor element having a second mark formed thereon which is aligned with the first mark so as to assure that the sensor element is located on the vertical line.

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4. (Amended) The positioning device according to claim [2]1, wherein the circuit board includes a third mark to be aligned with the first mark and the second mark to assure that the sensor element is located on the vertical line.

REMARKS

Claim 1 has been amended to include the limitations recited in original claim 2. Accordingly, claim 2 has been canceled.

Claims 1 and 3 stand rejected under 35 U.S.C. 102 as unpatentable over Horng. The Applicant respectfully traverses the rejection.

Claim 1 as amended specifically recites that the coil seat has a first mark formed thereon and that the sensor element has a second mark formed thereon which is aligned with the first mark so as to assure that the sensor element is located on the vertical line. It is respectfully submitted that none of the prior art of record disclose this claimed structure.

It is respectfully submitted that Horng fails to disclose any structure which can reasonably be considered to be the first and second marks as recited in claim 1, originally recited in claim 2. This is admitted by the Examiner in the first full paragraph on page 4 of the Official Action.

Therefore, it is respectfully submitted that claim 1 recites structure that is fully patentably distinguishable over any of the prior art of record, in particular, Horng. Accordingly, withdrawal of the rejection is respectfully requested.

Claim 3 specifically recites that the circuit board includes a notch for receiving the sensor element. It is respectfully submitted that none of the prior art of record disclose this claimed structure.

It will be noted that the groove 27 relied upon by the Examiner is formed in the stator base 2. As such, it is respectfully submitted that the groove 27 according to Horng cannot reasonably be considered to be a notch defined in the circuit board as recited in claim 3.

Therefore, it is respectfully submitted that claim 3 recites structure that is fully patentably distinguishable over any of the prior art of record, in particular, Horng. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-4 stand rejected under 35 U.S.C. 103 as unpatentable over Horng in view of Murata. The Applicant respectfully traverses the rejection.

As noted above, Horng fails to disclose the first and second marks as recited in claim 1. The Examiner apparently relies upon Murata to teach/suggest this structure. The Examiner refers to the holding part (frame body) 104 as a

"mark". The Applicant respectfully disagrees with such an interpretation. Murata fails to describe the frame body 104 as a mark of any kind. While the frame body 104 according to Murata locates and holds the Hall effect type sensor, there is no disclosure in Murata of the frame body constituting or being used as a mark. The frame body 104 includes various structures (connector part 3, mounting parts 6, and holding parts 11 and 12) to locate and hold the Hall effect type sensor; however, none of these structures function as marks. Therefore, it is respectfully submitted that the frame body 104 cannot reasonably be considered to be a mark and thus cannot reasonably be considered to teach or suggest the first and second marks recited in claim 1.

It will be noted that Murata is concerned with an improved Hall effect type sensing device capable of easily determining the positions of components, outputting high accuracy signals, and facilitating assemblage in an automated production line. (col. 1, Ins. 36-42) To this end, the Hall effect type sensor has a frame body 10, made of synthetic resin and shaped by injection molding, which forms a connector part 3, mounting parts 6, and holding parts 11 and 12 to locate and hold the Hall effect type sensor and a magnetic circuit forming member, without the use of jigs.

The present invention, on the other hand, is concerned with properly positioning the sensor element to provide high starting torque such that the rotor of the motor used in the miniature fan can be easily activated. To this end, the sensor element is located on a vertical line extending from the end edge of the lower polar plate assembly along a direction parallel to a longitudinal axis of the axial tube, as recited in claim 1. Accordingly, the first mark formed on the coil seat and the second mark formed on the sensor element are aligned to assure the location of the sensor element.

It will be noted that the locating of the sensor element according to Murata is completely different than according to the claims. Murata involves forming a synthetic resin frame body by injection molding which has specific structural parts designed to locate and hold the sensor element. The present invention avoids the need for injection molding a frame body of any kind. The present invention involves the use of various marks to assure proper location of the sensing element. Murata avoids using any marks.

Therefore, it is respectfully submitted that claim 1 recites structure that is fully patentably distinguishable over any of the prior art of record, in particular, Horng and Murata. Accordingly, withdrawal of the rejection is respectfully requested.

As argued above, Horng fails to disclose a notch defined in the circuit board as recited in claim 3. It is respectfully submitted that Murata also fails to disclose, teach or suggest this claimed structure. Accordingly, it is respectfully submitted that claim 3 recites structure that is fully patentably distinguishable over any of the prior art of record, in particular, Horng and Murata, and withdrawal of the rejection is respectfully requested.

Claim 4 specifically recites that the circuit board includes a third mark. It is respectfully submitted that none of the prior art of record disclose, teach or suggest this claimed structure. The Examiner has not cited any specific disclosure or teaching which is considered to render this structure obvious. Since neither Horng nor Murata mention any marks whatsoever, it is not understood how they can reasonably be considered to render the structure of claim 4 obvious. As argued above, it is respectfully submitted that Murata fails to disclose, teach or suggest the third mark recited in claim 4.


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Therefore, it is respectfully submitted that claim 4 recites structure that is fully patentably distinguishable over any of the prior art of record, in particular, Horng and Murata. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the amendments to the claims and the foregoing remarks, it is respectfully submitted that all of the claims under consideration are allowable and the application is in condition for allowance. Accordingly, it is respectfully requested that claims 1, 3 and 4 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

Respectfully submitted,


Klifton L. Kime
Registration No. 42,733

BACON & THOMAS, PLLC
625 Slaters Lane - 4th Floor
Alexandria, VA 22314-1176
Telephone: (703) 683-0500
Facsimile: (703) 683-1080

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